Background

The use of digital technologies is ubiquitous in the United States, especially among adolescents; over 90% of adolescents are online regularly. Teens use the internet to find information, interact with peers, and seek health information. The popularity of mobile digital devices among teens suggests opportunities for digital asthma self-management systems.

In Florida, 10.2% of teens in high school have asthma. Self-management helps control asthma, reduce exacerbation and emergency room visits, reduce school absenteeism, and improve quality of life. Previous research by the University of South Florida shows that teens with asthma prefer communicating about and accessing asthma resources with mobile devices.

Methods

N = 16
Asthmatic Treated with Maintenance Medication
13 to 18 years old

N = 6
AsthmaPulse

N = 10
AsthmaMD

In-Depth Interviews
A Priori Codes
Constant Comparative

Results 1

Teens
Suggested Benefits
- Connect with the healthcare provider
  - Keep the provider informed in healthy clinic visits
  - Stay-on-top-of-things and understand asthma trends
- Monitor asthma status
- Early detection when asthma worsens

Expected Barriers
- The use of more than one device
- Forgetfulness
- Access to Wi-Fi

- Better and direct communication with the patient
- Prevention of teen compliance with app use
- Better compliance, more accurate individual assessment of treatment (reduction of over-prescription)
- Offers teens a “more controllable” environment away from abilities that “evolve”

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Social Marketing

Specific Aims

1. Identify specific hurdles in currently available apps
2. Identify suggestions for design of an asthma self-management app for future effectiveness testing

Approach

This concept was previously confirmed using a social marketing approach among asthmatic teens, their caregivers, and their healthcare providers to identify the marketing mix.

Results 2

Teens’ design suggestions focused on making the experience of using the app personalized and clear, and teen-friendly.

Both healthcare provider and teens suggest personalized notifications tailored for an individual’s asthma experience.

The provider suggested features relevant to healthcare activity and technology access.

Product Suggestions

- Access
  - Physicians current devices
  - New email notification
  - Text message or email

- Notification
  - Use of visuals and videos
  - Provide enrichment activities

- Important Additions
  - Specific responses to “messagealeza”
  - Detailed symptoms list
  - Shared access to data

- Collaboration
  - 1-to-1 communication with healthcare providers

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Conclusions

For more information, scan the QR code to visit our website.

References: